United States Forest Service, R-1, R-4, and R-6
Department of Agriculture

File Code: 2670/1950 **Date:** August 17, 1995

Subject: Streamlining Biological Evaluations and Conclusions for Determining Effects to Listed, Proposed and Sensitive Species

To: Forest Supervisors

The purpose of this letter is to transmit a streamlined process for dealing with sensitive species and to clarify conclusions of effects for listed, proposed and sensitive species. Our intent is to provide greater flexibility in documenting effects of projects on sensitive species, and to reduce redundancy by showing the effects of sensitive species within NEPA documents and the project files. The complexity of the project will determine the extent of analysis and documentation required.

The streamlined process for doing biological evaluations for sensitive species focuses on two areas:

1. Incorporating the Effects on Sensitive Species into the NEPA Document

   Information currently found in biological evaluations (for sensitive species only), including the documentation of effects and the rationale for conclusions will be consolidated into the main text or appendix of the EA or EIS. There will no longer be a need to have "stand alone" biological evaluations for sensitive species.

2. Summarizing the Conclusions of Effects of the Biological Evaluations for Sensitive Species

   Two forms are provided to summarize the conclusions of effects on sensitive species. (see pages 19 and 20 of Appendix "B"). Form 1 allows a single alternative in the NEPA process to be summarized (and should be used with "categorical exclusions" and on-going activities). Form 2 provides a format for several alternatives to be summarized, and should be used for most Forest Service proposed activities. Both use conclusions recommended in the May 15, 1992 letter signed by Associate Chief George Leonard, and which have been used for several years.

If you have existing or planned activities that utilize an older biological evaluation format, there is no requirement or reason to change. This process consolidates the analysis, effects and conclusions into the NEPA document, but does not change the requirement to analyze, to display effects, or to mitigate and manage activities to sustain sensitive species as part of the overall biodiversity on the landscape.

Enclosed is a copy of "Developing Biological Assessments/Evaluations For Forest Service Activities" which explains the summarized BE process and appropriate conclusions for listed, proposed and sensitive species (Appendix "B"). Note: Biological Assessments for listed and proposed species will continue to follow the 50 CFR Part 402 (Interagency Cooperation - Endangered Species Act of 1973, as amended; Final Rule) and FSM 2670 policy.

There has been some confusion over the appropriate conclusion of effects for listed, proposed and sensitive species. For consistency and clarity, the conclusions summarized in Appendix "A" (see

enclosure) should be used when submitting biological assessments to the U.S. Fish and Wildlife Service (FWS), or USDC National Marine Fisheries Service (NMFS), and when referring to the conclusions of effects in NEPA documents for sensitive species.

Biological evaluation and assessment training will be initiated in the near future to help employees adjust to the streamlined process and answer questions. Any suggested improvements in the biological evaluation or assessment processes are welcome. We are looking for ways to further streamline biological evaluations and assessments, without compromising our stewardship responsibilities for these important resources. If you have any questions or comments, please contact Bill Ruediger (406-329-3100), Jay Gore (801-625-5664) or Grant Gunderson (503-326-6602).

/S/ John Hughes	/S/ Jack A. Blackwell	/S/Robert J. Devlin
HAL SALWASSER	DALE BOSWORTH	JOHN LOWE
Regional Forester, R-1	Regional Forester, R-4	Regional Forester, R-6

Appendix "A"

Conclusions Of Effects For Use In Biological Evaluations and Assessments
USDA Forest Service - Regions 1, 4, and 6
August, 1995

Listed Species:

1. No Effect

Occurs when a project or activity will not have any "effect" on a listed species, or critical habitat.

2. May Effect - Likely To Adversely Affect (LAA)

If the determination in the biological assessment is that the project May Effect - Likely To Adversely Affect a listed species or critical habitat, formal consultation must be initiated (50 CFR 402.12). Formal consultation must be requested in writing through the Forest Supervisor (FSM 2670.44) to the appropriate FWS Field Supervisor, or NMFS office.

3. May Effect - Not Likely To Adversely Affect (NLAA)

If it is determined in the biological assessment that there are "effects" to a listed species or critical habitat, but that those effects are not likely to adversely affect listed species or critical habitat, then written concurrence by the FWS or NMFS is required to conclude informal consultation (50 CFR 402.13).

4. Beneficial Effect

Written concurrence is also required from the FWS or NMFS if a beneficial effect determination is made.

Requests for written concurrence must be initiated in writing from the Forest Supervisor to the State Field Supervisor (FWS or NMFS).

Proposed Species:

Whenever serious adverse effects are predicted for a proposed species or proposed critical habitat, conferencing is required with the FWS or NMFS.

1. No Effect

When there are "no effects" to proposed species, conferencing is not required with FWS or NMFS.

2. Not Likely to Jeopardize the Continued Existence Of The Species Or Result In Destruction Or Adverse Modification Of Proposed Critical Habitat

This conclusion is used where there are effects or cumulative effects, but where such effects would not have the consequence of losing key populations or adversely affecting "proposed critical habitat". No conferencing is required with FWS or NMFS if this conclusion is made. However, for any proposed activity that would receive a "Likely To Adversely Affect" conclusion if the species were to be listed, conferencing may be initiated.

3. Likely To Jeopardize The Continued Existence Of The Species Or Result In Destruction Or Adverse Modification Of Proposed Critical Habitat

This conclusion must be determined if there are significant effects that could jeopardize the continued existence of the species, result in adverse modification or destruction of proposed critical habitat, and/or result in irreversible or irretrievable commitments of resources that could foreclose options to avoid jeopardy, should the species be listed. If this is the conclusion, conferencing with FWS or NMFS is required.

Sensitive Species:

1. No Impact (NI)

A determination of "No Impact" for sensitive species occurs when a project or activity will have no environmental effects on habitat, individuals, a population or a species.

2. May Impact Individuals Or Habitat, But Will Not Likely Contribute To A Trend Towards Federal Listing or Cause A Loss Of Viability To The Population Or Species (MIIH)

Activities or actions that have effects that are immeasurable, minor or are consistent with Conservation Strategies would receive this conclusion. For populations that are small - or vulnerable - each individual may be important for short and long term viability.

3. Will Impact Individuals Or Habitat With A Consequence That The Action May Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To The Population or Species (WIFV)

Loss of individuals or habitat can be considered significant when the potential effect may be: 1. Contributing to a trend toward Federal listing (C-1 or C-2 species); 2. Results in a significantly increased risk of loss of viability to a species; or, 3. Results in a significantly increased risk of loss of viability to a significant population (stock).

4. Beneficial Impact (BI)

Projects or activities that are designed to benefit, or that measurably benefit a sensitive species should receive this conclusion.

Appendix B

DEVELOPING BIOLOGICAL ASSESSMENTS/EVALUATIONS
FOR FOREST SERVICE ACTIVITIES
August, 1995

I. DEFINITIONS:

"Action" means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies in the United States or upon the high seas. Examples include, but are not limited to: (a) actions intended to conserve listed species or their habitat; (b) the promulgation of regulations; (c) the granting of licenses, contracts, leases, easements, rights-of-way, permits, or grants-in-aid; or (d) actions directly or indirectly causing modifications to the land, water, or air.

"Action Area" means all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.

Applicant: "refers to any person, as defined in section 3(13) of the Act (ESA), who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action." 50 CFR 402.02

Biological Assessment: "Information (documentation) prepared by or under the direction of the Federal agency concerning listed and proposed species and proposed critical habitat that may be present in the action area and the evaluation of potential effects of the action on such species and habitats."

The purpose of the biological assessment is to evaluate the potential effects of the action on listed or proposed species or designated or proposed species or designated or proposed critical habitat, and determine whether any such species and habitat are likely to be adversely affected by the action.

> **Note**: Biological Assessments are conducted for "major Federal construction projects" requiring an EIS.

Biological Evaluation: A documented Forest Service review of programs or activities in sufficient detail to determine how an action or proposed action may affect any sensitive species.

Biological Opinion. An official report by the Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (NMFS) issued in response to a formal Forest

Service request for consultation or conference. It states whether an action is likely to result in jeopardy to a species or adverse modification of its critical habitat.

Candidate Species. Those plant and animal species that, in the opinion of the FWS, may become endangered or threatened. These are documented in the FWS's program advice to its Regional Directors for preparation of listing packages or documented in a current Federal Register Notice of Review (categories 1 and 2) for threatened or endangered listing.

The FWS recognized three categories of candidate species for listing as endangered or threatened:

> Category 1 are taxa for which the FWS has substantial information on hand to support the biological appropriateness of proposing to list the species as endangered or threatened.
>
> Category 2 are taxa for which information now in possession of the FWS indicates that proposing to list the species as endangered or threatened maybe appropriate, but for which conclusive data on biological vulnerability and threat(s) are not currently available to support proposed rules.
>
> Category 3 are taxa that are no longer being considered for listing as endangered or threatened and are not regarded as candidate species. There are three subcategories: 3a are taxa for which the FWS has persuasive evidence of extinction; 3b are taxa that while represented in published revisions and monographs do not meet the Endangered Species Act definition of species on the basis of current taxonomic understanding; 3c are taxa that have proven to be more abundant or widespread than was previously believed and/or those that are not subject to any identifiable threat.

Concurrence. Requested written opinion (agreement) of the FWS or NMFS on the effects of a proposed project or program upon listed species or their habitat. Written concurrence is requested for all non-major projects (EA) in which the biological assessment determines a "beneficial, not likely to adversely or may adversely affect" call. Written concurrence is required for all major projects (EIS) irrelevant the biological assessment determination.

Conference. Coordination with the FWS or NMFS on all agency programs or activities that is likely to jeopardize the continued existence of any species proposed for listing or likely to result in the destruction or adverse modification of proposed critical habitat.

Conservation Agreement. A formal written document agreed to by FWS and/or NMFS and another Federal agency, Tribe, State agency, local government, or the private sector to achieve the conservation of candidate species through voluntary cooperation. It documents the specific actions and responsibilities for which each party agrees to be accountable. The objective of a Conservation Agreement is to reduce threats to a candidate species and/or its habitat. An effective Conservation Agreement may lower listing priority or eliminate the need to list a species.

Conservation Strategy. Developed for candidate and sensitive species. Outline the biological limiting factors, the recommended conservation measure to manage or protect the species, and usually include a monitoring plan. Based on the best scientific information on the species available.

Critical Habitat. Refers to an area designated (by FWS or NMFS) as critical habitat under 50 CFR parts 17 or 226.

EA. Acronym for Environmental Assessment.

EIS. Acronym for Environmental Impact Statement.

Endangered Species. Any species in danger of extinction throughout all or a significant portion of its range. This does not include a species of the Class Insecta determined by the

Secretary to be a pest whose protection under the provisions of the Endangered Species Act would present an overwhelming and overriding risk to humans.

ESA. Acronym for Endangered Species Act.

Formal Consultation. A process conducted between the FWS or NMFS and the Federal agency when a proposed program or activity is likely to adversely affect a listed species or its critical habitat. It commences with a written request for formal consultation by the Federal agency proposing the action and concludes when the FWS or NMFS issues their biological opinion.

FWS. Acronym for U.S. Fish and Wildlife Service.

Informal Consultation. All contacts, discussion or correspondence between a Federal agency or the designated non-Federal representative and the FWS or NMFS that take place prior to formal consultation. The need for formal consultation will generally be determined as a result of informal consultation.

Metapopulation. A collection of interdependent populations affected by recurrent extinctions and linked by recolonizations (Murphy et al. 1990).

NEPA. Acronym for National Environmental Policy Act.

NMFS. Acronym for National Marine Fisheries Service.

PETS. Acronym for "proposed, endangered, threatened and/or sensitive species."

Population. A group of individuals that interbreed and produce offspring (Primack 1993).

Proposed Species. Any species of fish, wildlife, or plant that is proposed by the Fish and Wildlife Service or the National Marine Fisheries Service to be listed as threatened or endangered.

Sensitive Species. Those plant and animal species identified by a Regional Forester for which population viability is a concern, as evidenced by:

1. Significant current or predicted downward trends in population numbers or density.

2. Significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Sensitive Habitat. Habitats identified by a Regional Forester where one or more sensitive species occurs.

Threatened Species. Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range and that the appropriate Secretary has designated as a threatened species. (Some States also have declared certain species as threatened through their regulations or statutes.)

Viable Populations. A population that has the estimated numbers and distribution of reproductive individuals to ensure the continued existence of the species throughout its existing range (or range required to meet recovery for listed species) within the planning area.

II. **ROLES AND RESPONSIBILITIES**

2670.44 - Regional Foresters. Ensure that specific management objectives and legal and biological requirements for the conservation of endangered, threatened, proposed, and sensitive plants and animals are included in Regional and Forest planning, and ensure that planning for those species common to two or more Forests is coordinated among concerned units.

Ensure that standards for biological evaluations are met (FSM 2672.42) for all Regional programs and activities.

Enter consultation when requested by the FWS or NMFS. Initiate early consultation when requested by a prospective permit or license applicant. Initiate conference when Forest Service actions may have an adverse effect on a species proposed for Federal listing.

2670.45 - Forest Supervisors. Ensure that legal and biological requirements for the conservation of endangered, threatened, and proposed plants and animals are met in Forest land and resource planning; ensure compliance with procedural and biological requirements for sensitive species.

Make recommendations to the Regional Forester for critical or essential habitat designation on National Forest System lands.

Determine distribution, status, and trend of threatened, endangered, proposed, and sensitive species and their habitats on Forest lands.

Approve biological assessments and formally or informally consult with the Fish and Wildlife Service or the National Marine Fisheries Service to determine whether any program or activity funded, authorized, or carried out on the Forest may affect an endangered, threatened or proposed species or its habitat. For projects that may have an adverse effect on a listed or proposed species or its habitat, or for projects designed for the direct benefit of a threatened or endangered species, the Forest Supervisors must contact the Regional Forester, in writing, to notify him or her that consultation or conference has been initiated.

Make requests to the FWS (State Supervisors) or NMFS for written concurrences for "not likely to adversely affect", and "beneficial effect" determinations in biological assessments.*

Enter into formal or informal consultation when requested by FWS or NMFS.*

Determine who on the Forest meets the "journey level wildlife biologist, botanist and fisheries biologist" qualifications. These are the only people who can sign-off on biological assessments and evaluations (review or approve).

*Not in Forest Service Manual - Regional direction.

2670.46 - District Rangers. Ensure compliance with legal and biological requirements for the conservation of threatened, endangered, and proposed species in District land management and project planning; ensure compliance with procedural and biological requirements for sensitive species.

Identify, manage, and protect essential and critical habitats to meet legal requirements and recovery objectives for federally listed species; identify, protect, and manage habitat necessary to meet sensitive species objectives.

Conduct necessary biological assessments and evaluations and notify the Forest Supervisor of those projects requiring formal or early consultation or conference with the FWS or NMFS.

Prohibit the taking of threatened and endangered species of plants and animals, except under FWS or NMFS permits. Prohibit the collection or taking of sensitive plants except as authorized by Regional policy.

2672.42 - Journey Level Biologists/Botanists. Journey (GS-11), or higher level biologist or botanist must conduct, review or approve biological assessments or evaluations. GS-9 level wildlife biologists, botanists or fisheries biologists can conduct, review and approve biological assessments or evaluations with Forest Supervisor approval.

III. PREPARING BIOLOGICAL ASSESSMENTS AND EVALUATIONS

When does a Biological Evaluation or Biological Assessment need to be conducted?

"**2672.4**. Review all Forest Service planned, funded, executed, or permitted programs and activities for possible effects on endangered, threatened, proposed, or sensitive species. The biological evaluation is the means of conducting the review and of documenting the findings. Document the findings of the biological evaluation in the decision notice. Where decision notices are not prepared, document the findings in Forest Service files. The biological evaluation may be used or modified to satisfy consultation requirements for a biological assessment of construction projects requiring an environmental impact statement."

Biological evaluations/assessments are required for the proposed action (action that will be implemented). Biological assessments (for listed and proposed species) will remain stand alone documents.

Biological evaluations (for sensitive species) will be prepared for a range of alternatives, as part of the effects analysis in the NEPA review. It is essential that the information required for biological evaluations be included in the NEPA documents, since there will no longer be separate stand alone documents. A separate conclusionary call summary for each sensitive species (see Step 5, and the attached example) will be prepared or reviewed and signed by the appropriate fisheries biologist, wildlife biologist or botanists.

Applicant Status

Applicant status is not granted for "programatic activities" like Forest Plan revisions and PACFISH. Usually, applicant status will be granted only in cases where formal consultation is required. Applicant status may be granted to a permittee or contractor who's existing permit or contract could be modified by site specific consultation on a listed or proposed species. Applicants will be provided with final draft correspondence relating to their permit or contracts and consultations (this includes draft Biological Opinions). In cases where extensions in the 180 day consultation period are required or agreed upon, applicants must be provided with "a written statement setting forth the estimated length of the proposed extension and the reasons

why the extension is necessary." A consultation involving an applicant cannot be extended for more than 60 days without the consent of the applicant.

2672.41 - Objectives of the Biological Assessment or Evaluation

1. To ensure that Forest Service actions do not contribute to loss of viability of any native or desired non-native plant or contribute to animal species or trends toward Federal listing of any species.

2. To comply with the requirements of the Endangered Species Act that actions of Federal agencies not jeopardize or adversely modify critical habitat of Federally listed or proposed species.

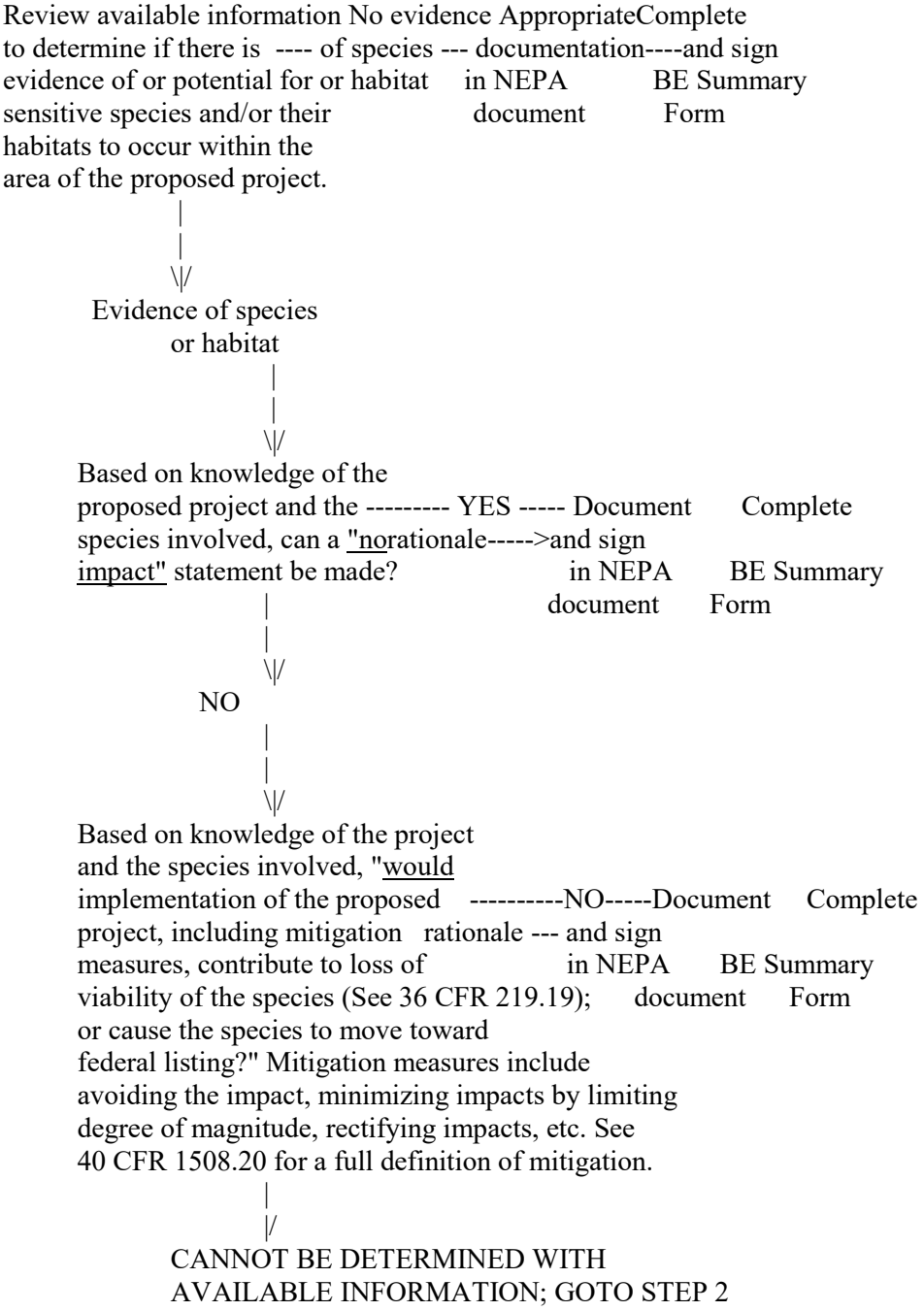
3. To provide a process and standard by which to ensure that threatened, endangered, proposed, and sensitive species receive full consideration in the decisionmaking process.

2672.43 - Procedure for Conducting Biological Assessments and Evaluations. A suggested procedure for conducting and documenting findings of a biological evaluation is outlined in exhibit 1.

Exhibit 1

BIOLOGICAL EVALUATION PROCESS FOR SENSITIVE SPECIES

STEP 1: PREFIELD REVIEW



STEP 2: FIELD RECONNAISSANCE - Use Regional procedures.

Following field reconnaissance a determination of effects must be made and the rationale for the determination must be included in the NEPA document. Complete and sign the BE Summary Form.

Step 1 - Prefield Reviews

Identification of potential PETS species and habitat present on the proposed project area. **Note**: document all of the following steps.

1. Prepare a list of all known or suspected PETS species and habitat on the proposed project area (2672.42).

2. Biologist/Botanist should review files and records, and confer with knowledgeable Forest Service employees about other potential PETS species and habitat, or locations of known or suspected species.

3. Biologist/Botanist should contact State wildlife, fish, and plant management agencies for additional PETS species or locations of known or suspected PETS species. State agencies should include, but not be limited to, Fish and Wildlife Departments and Natural Heritage Programs.

4. Consult known experts at Universities, Research Stations, and other agencies about PETS species occurrence and habitat.

5. If the project is a major construction project, is controversial, or if Federally listed species may be present, provide habitat and species occurrence summary to the FWS AND/OR NMFS (along with a description of the project and project area) and: (a) request a written species list concurrence and (b) request a list of Federally listed species that may be present.

6. If no species or habitat occur on the proposed project area, document and proceed with the project.

   Species should be identified by their correct name and listing status (threatened, endangered, proposed, sensitive), whether they are resident or migratory, and whether habitat is within or outside of recovery areas, essential habitat, or critical areas identified in a Conservation Strategy.

Step 2 - Field Clearances And Surveys

Refining PETS species occurrence and habitat delineation are important objectives of the Field Clearances. **Note**: When field clearances and surveys are required, searches for species occurrence and habitat suitability must be done by a knowledgeable reviewer.

It is important to focus the field surveys on the type of decisions being made and the species of concern. Existing information about some species may be adequate to determine the effects of the proposed project. For example, if it is known that bull trout occur in a given stream - it may or may not be important to know specifically how a certain stream reach is used by the species. In situations where there is a high likelihood that a species is present, or where habitat suitability reflects that typically used by the species of concern, then it should be assumed the species is present. If the proposed project will adversely affect the species presence, reproduction, survival or vulnerability, then site specific information on presence and habitat quality is probably important.

In situations where the presence of a species is unlikely or where habitat is of such poor quality that its significance is discountable, then surveys may not be necessary even if substantial habitat modifications may occur.

1. Map known and suspected species occurrence on accurate topographic or planimetric maps. Map known and potential habitat on same map base. The size of area mapped should include the project area and enough adjacent habitat to determine effects and cumulative effects. For some plants, and animals with small home ranges, the project area may suffice. For fish and animals with large home ranges such as salmon, bull trout, grizzly bears and wolves, the size of area mapped outside the project location may extend many miles. Note: for the wide ranging species, it may be necessary to tier to the hierarchical level above the project. This would likely be the watershed or sub-watershed level (or BMU for grizzly bears).

2. Provide field surveys to:

    a. Assess potential PETS habitat.
    b. Search suitable habitat for PETS species occurrence.
    c. Confirm known habitat is suitable.
    d. Refine knowledge of how habitat exists on the landscape and how species use their habitat. This could include travel corridors, relationships between cover and forage areas, human disturbances, and fragile habitat situations.

3. If suspected species occurrence or potential habitat is determined not to be present, and if no other PETS species or habitat occurs, document and proceed with the project.

Step 3 - Determination of Effects

Listed and Proposed Species

"Effects of the action" refers to the direct, indirect and cumulative effects of an action on the species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action, that will be added to the environmental baseline. The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process. Indirect effects are those that are caused by the proposed action and are later in time but still are reasonably certain to occur. Interrelated actions are those that are part of a larger action and depend on the larger action for their justification. Interdependent actions are those that have no independent utility apart from the action under consideration - 50 CFR 402.02.

1. Biologist/Botanist should begin the analysis of effects by first preparing the environmental baseline. The environmental baseline is that which occurs before the proposed action or activity is implemented. It includes the past and present impacts of all Federal, State, and private actions and human activities in the action area. Also included should be anticipated impacts of other Federal, State, or private actions that are planned but not implemented - 50 CFR 402.02.

2.The direct and indirect effects should be assessed. An example of a direct effect would be the building of a road into a roadless grizzly bear habitat. The direct effects might be increased risk of human mortality, displacement of bears from suitable occupied habitat, and the destruction of micro-sites used by grizzlies for food. Direct effects result from the proposed activity.

Indirect effects are those that are caused by the action, are later in time, but are reasonably certain to occur. In the case above, if the road were not built for a specific timber sale(s), but such sales were reasonably certain to occur at a later time, then the indirect effects would be those created by future timber sales. The future timber sales could not occur without the road--hence the road causes the future sales. In NEPA analysis, these are often referred to as "connected actions."

Other tests for whether an effect is indirect is if the actions are interrelated or interdependent.

For most Forest Service projects and actions, direct and indirect effects will occur to individuals or populations - or to habitat supporting these relative numbers. Exceptions to this include endemic plants, insects, mollusks or fish whose entire population might exist in a small area and potentially be affected.

3.Cumulative effects should be addressed next. Cumulative effects are those effects on the species caused by other projects and activities unrelated to the action being considered.

Again, using the grizzly bear example, the effects of building a road into roadless grizzly bear habitat, then leaving it open to the public, might have an insignificant effect on the grizzly bear population. The cumulative effects of 20 roads, 10 campgrounds, 3 major resort complexes, and a dump could have an important impact on future grizzly bear populations.

Cumulative effects are important in that they impact many individuals or an entire population.

Sensitive Species

Incorporate into NEPA document in affected environment, effects, alternatives and appendix (Summary of Conclusions of Effects) sections. Use NEPA definition of direct effects, indirect effects, and cumulative effects. Since there is no stand alone document for sensitive species, all direct, indirect and cumulative effects must be clearly displayed in the NEPA documents (or appendix). This may require that more information is incorporated into the NEPA document than when a stand alone biological evaluation was prepared for sensitive species. The total amount of documentation is expected to decline.

The rationale for the conclusionary call (Step 5) must also be displayed.

Step 4 - Determination of Irreversible or Irretrievable
Commitment Of Resources

This step is required for listed and proposed species only. There needs to be a review and clear statement whether or not the action or activity will result in a irreversible or irretrievable commitment of resources

that foreclose the formulation or implementation of reasonable and prudent alternatives which would violate Section 7(a)(2)...Jeopardy.

Step 5 - Determination of Conclusions For Biological Assessments and **Biological Evaluations**

Biological Assessments:

Listed Species

The determination of whether a proposed action will have a "No Effect", "May Effect - Likely To Adversely Affect", "May Effect - Not Likely To Adversely Affect", or "Beneficial Effect" is a critical decision for Biological Assessments. If there is a question about whether or not a project may affect a species, informal consultation with the FWS or NMFS is recommended. Also, consulting a biologist or botanist at the next highest organizational level should help.

Endangered and threatened species are protected regardless of where they occur. For example, if a grizzly bear occurs outside a recovery area, provisions must be made to protect it from harm and harassment, although management of habitat for grizzlies is not necessary.

1."No Effect"

Occurs when a project or activity will not have any "effect" on a listed species, or critical habitat. If a "no effect" determination is made in a biological assessment for a major construction project requiring an EIS, the biological assessment must be submitted to the FWS or NMFS for review and written concurrence. If a "no effect" determination is made in an EA (for a project not requiring an EIS), the project can proceed without further coordination (FSM 2671.44).

If there is any question as to whether there will be "no effect", informal consultation should be initiated. Also, if there are "effects" stated in the NEPA document on listed species, then there cannot be a "no effect" determination in the biological assessment or evaluation.

2.May Effect - Likely To Adversely Affect

If the determination in the biological assessment or evaluation is that the project May Effect - Likely To Adversely Affect a listed species or critical habitat, formal consultation must be initiated (50 CFR 402.12). Formal consultation must be requested in writing through the Forest Supervisor (FSM 2670.44) to the appropriate U.S. Fish and Wildlife Service State or Field Supervisor, or National Marine Fisheries Service office.

If all Forest Plan standards and guidelines, interim direction and Recovery Plan conservation recommendations to protect threatened or endangered species cannot be implemented, a "May Effect - Likely To Adversely Affect" situation likely exists. Forests should first informally consult with the FWS or NMFS to determine if the "May Effect - Likely To Adversely Affect" situation can be avoided.

3.May Effect - Not Likely To Adversely Affect

If it is determined in the biological assessment or evaluation that there are "effects" to a listed species or critical habitat, but that those effects are not likely to adversely affect listed species or critical habitat, then written concurrence by the FWS or NMFS is required (50 CFR 402.13). A situation where a "May effect - not likely to adversely affect" conclusion could be made is when there are possible "effects" such as displacement or habitat modification, but those "effects" are insignificant or discountable. When Forest Plan standards and guidelines, interim direction, or Recovery Plan conservation recommendations designed to protect threatened and endangered species are fully implemented and there are "effects" to listed species(i.e., displacement and habitat modification), then these may be considered to "may effect - not likely adversely affect" a listed species. Even when Forest Plan standards and guidelines, interim direction and Recovery Plan conservation recommendations are met, final determination of effects must be based on the site specific analysis in the biological assessment.

4.Beneficial Effect

Written concurrence is also required from the FWS or NMFS if a beneficial effect determination is made. A "beneficial effect" occurs whenever a project or activity is determined to substantially improve the habitat or status of a threatened or endangered species, or its habitat.

Requests for concurrence must be initiated in writing from the Forest Supervisor to the State or Field Supervisor.

Proposed Species

Whenever serious adverse effects are predicted for a proposed species or proposed critical habitat, conferencing is required with the FWS or NMFS. Most "proposed species" will have also been designated as sensitive by the Forest Service. Once a species is "proposed" for Federal listing, no longer consider it as Forest Service "sensitive."

"Each Federal agency shall confer with the U.S. Fish and Wildlife Service on any action which is likely to jeopardize the continued existence of any proposed species or result in the destruction or adverse modification of proposed critical habitat." 50 CFR 402.10.

When a species is proposed, all on-going and proposed projects should be reviewed and one of the following conclusions determined.

1. No Effect

See "no effect" for listed species.

2. Not Likely To Jeopardize The Continued Existence Of The Species Or Result In Destruction Or Adverse Modification Of Proposed Critical Habitat.

This conclusion is used where there are effects or cumulative effects, but where such effects would not have the consequence of losing key populations (stocks) or adversely affecting "proposed critical habitat." The important factor for most Forest Service activities is probably the potential to adversely modify potential or proposed critical

habitat. As part of this conclusion should be a discussion of whether or not there are irreversible or irretrievable commitments of resources that might foreclose options to recover a species, should it be listed. If there are significant irreversible or irretrievable commitments of resources, this is probably not the correct conclusion. If there are any doubts as to what the conclusion should be, confer with the FWS or NMFS.

The trigger for a significant effect on a proposed species requires that either the species be jeopardized or a significant adverse modification occur to proposed critical habitat. If the proposed project or activity does not result in this magnitude of effect, conferencing is not required. However, any proposed activity that
would receive a "Likely To Adversely Affect" conclusion if the species were to become listed may be conferenced.

3. Likely To Jeopardize The Continued Existence Of The Species Or Result In Destruction Or Adverse Modification Of Proposed Critical Habitat.

This conclusion must be determined if there are significant effects that could jeopardize the continued existence of the species, result in adverse modification or destruction of proposed critical habitat, and/or result in irreversible or irretrievable commitments of resources that could foreclose options to avoid jeopardy, should the species be listed. If this is the conclusion, conferencing with FWS or NMFS is required. Also, any proposed activity that would receive a "Likely To Adversely Affect" conclusion if the species were to become listed should be conferenced. The benefit of conferencing on a "Likely To Adversely Affect" condition is that consultation will go faster and usually without modifications in the project if the species is listed.

Biological Evaluations:

For Forest Service Sensitive Species or Habitats. It is recommended that Forms 1 and 2, R1/4/6-2670-95 be used to summarize conclusions of effects (attached at the end of this document). The summary of conclusion of effects on sensitive species must be reviewed and approved by signature by a journey level fisheries biologist, wildlife biologist or botanist.

Sensitive species should be managed under the umbrella of a conservation strategy (2672.1). Conservation strategies should set objectives for habitat and populations, identify which habitat and associated populations are necessary for overall species viability, and provide coordination guidance for both primary and secondary habitat.

For interior salmonids (bull trout, cutthroat trouts, redband trout), the process recommended to determine population and species risk (viability) is Consideration Of Extinction Risks For Salmonids (B.Riemans. et. al.. December, 1993. Fish Habitat Relationships Technical Bulletin Number 14. Intermountain Research Station, USDA Forest Service).

1. No Impact.

A determination of "No Impact" for sensitive species occurs when a project or activity will have no environmental effects on habitat, individuals, a population or a species. If any "effects" are listed for a sensitive species in the NEPA document, then a "No Impact" conclusion is not appropriate.

2. May Impact Individuals Or Habitat, But Will Not Likely Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To the Population or Species.

Impacting of individuals or habitats of sensitive species should be given careful consideration. The loss of populations, stocks or metapopulations - is often the basis for eventual species extinction. The loss of individuals occurs in all populations and is a natural process. It is of significance only when it has a deleterious effect on the population or species. The loss of individuals is particularly serious when a species' status is such that listing under ESA is likely (C-1 and C-2 species). In these cases, any loss of individuals may result in a trend toward Federal listing.

Because sensitive species have been designated based on concerns for their viability, impacts on either individuals or populations are best managed under the umbrella of a Conservation Strategy. Without a Conservation Strategy, the best hierarchical level to base effects of management activities or actions is usually the population, metapopulation or stock (fish).

Activities or actions that have effects that are immeasurable or minor, or that are consistent with Conservation Strategies or conservation of the species would normally receive this conclusion. For populations that are very small - or vulnerable - each individual may be important for short and long term viability.

3. Will Impact Individuals Or Habitat With A Consequence That The Action Will Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To The Population Or Species.

Loss of individuals or habitat can be considered significant when the potential effect may be: 1. Contributing to a trend toward Federal listing (C-1 and C-2 species); 2. Results in a significantly increased risk of loss of viability to a species; or, 3. Results in a significantly increased loss of viability to a population (stock).

As stated above, the loss of populations is a significant event that can lead toward eventual species extinction. Definition of populations and metapopulations may be difficult, but is usually easier to assess than impacts of projects or activities on the viability of the entire species (particularly wide-ranging species).

Projects or activities that adversely affect many individuals, or even a few individuals in vulnerable populations, should probably receive this conclusion unless there is a Conservation Strategy. Projects or activities that are in conflict with Conservation Strategies or Conservation Agreements will receive this conclusion.

(Significant) Adverse impacts to sensitive species must not occur until a Conservation Strategy, or similar plan for species conservation, is prepared (2672.1). The purpose of a Conservation Strategy is to ensure cumulative effects do not result in reduced sensitive species viability or conditions that result in the need for Federal listing.

4. Beneficial Impact.

Projects or activities that are designed to benefit sensitive species should receive this conclusion.

For Sensitive Habitats:

1. Results In A Trend Toward Desired Future Condition.

This conclusion is appropriate when activities or actions compliment the ecological conditions being managed for, including the native plants and animals that are dependent on the sensitive habitat. It is assumed that such a determination will maintain or benefit plant and animal species dependent on the sensitive habitat.

2. Results In A Trend Away From Desired Future Condition.

This conclusion is appropriate when activities or actions result in sustaining degraded ecological conditions, or contribute toward further degradation of the native plants and animals dependent on the sensitive habitat. Such a determination is also assumed to result in a concern for viability for species that are dependent on the sensitive habitat, and may be in conflict with maintaining plant and animal diversity on the Planning Area (Forest).

Step 6 - Recommendations for Removing, Avoiding, or Compensating Adverse Effects

The Botanist/Biologist preparing the biological evaluation should recommend ways to remove, avoid, or compensate for adverse effects to PETS species. Often, this will be done during the interdisciplinary process of building alternatives and selecting a preferred alternative.

Step 7 - Documentation

All informal consultations with the U.S. Fish and Wildlife Service should be referenced including the date, the persons involved in the discussion, and a summary of significant discussion points.

Also, literature citations are necessary for collaborating conclusions on effects, habitat relationships, species ecology, and recommendations for removing or avoiding adverse effects. Should the proposed action be appealed or litigated, proper literature citation and documentation will become the first line of defense.

All contributors to relevant information in the biological evaluation process should be documented. This includes discussions with higher level biologists in the Forest Service, as well as those with other agency biologists and researchers.

SENSITIVE SPECIES BIOLOGICAL EVALUATION
SUMMARY OF CONCLUSION OF EFFECTS**

Project Name:_____

Alternative: _____

Species	No Impact	May Impact Individuals or Habitat, But Will Not Likely Contribute To A Trend Towards Federal Listing or Loss of Viability To The Population or Species	Will Impact Individuals Or Habitat With A Consequence That The Action May Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To The Population Or Species*	Beneficial Impact
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				

Prepared by/s/_____/s/_____Date:_____

Approved by/s/_____/s/_____/s/_____
Wildlife Biologist Fisheries Biologist Botanist

* Considered a trigger for a significant action in NEPA
** Note: The rationale for the conclusion of effects is contained in the NEPA document
Form 1 (R-1/4/6-2670-95)

SENSITIVE SPECIES BIOLOGICAL EVALUATION
SUMMARY OF CONCLUSION OF EFFECTS**

Project Name: _____

Species	ALT 1	ALT 2	ALT 3	ALT 4	ALT 5	ALT 6
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						

Prepared by:/s/_____/s/_____Date: _____

Approved by:/s/_____/s/_____/s/_____
Wildlife Biologist Fisheries Biologist Botanist

NI =No Impact
MIIH =May Impact Individuals Or Habitat, But Will Not Likely Contribute To A Trend Towards Federal Listing Or Loss Of Viability To The Population Or Species
WIFV* =Will Impact Individuals Or Habitat With A Consequence That The Action May Contribute To A Trend Towards Federal Listing Or Cause A Loss Of Viability To The Population Or Species
BI = Beneficial Impact

***Trigger for a Significant Action As Defined In NEPA**
** Note: Rationale For Conclusion Of Effects Is Contained In The NEPA Document.

Form 2 (R-1/4/6-2670-95)